TRAFFIC RECORDS

I. PROGRAM OVERVIEW

Traffic record systems include the data elements necessary for problem identification, problem analysis, and countermeasure evaluation in all areas of traffic safety. Traffic record programs include data related to collisions and to every aspect of the program infrastructure. Data pertaining to people, vehicles, and roadways are all part of the total traffic records network.

The most common theme of the total records program is the Statewide Integrated Traffic Records System (SWITRS). Installed at California Highway Patrol (CHP) in 1974, the SWITRS provides collision-related reports to state and local agencies. Since SWITRS inception, there have been major advances in computing capabilities, rendering certain features of the SWITRS system cumbersome, time-consuming, and labor intensive. The cost and the impact of changing to an on-line system are presently being studied and system re-development is in progress.

The Traffic Accident Surveillance and Analysis System (TASAS), maintained by Caltrans, is the repository of all crash data pertaining to state and interstate highways, and includes detailed data on the location and types of roadways, as well as collisions occurring on these highways. TASAS does not include local (city or county) streets or roadway data.

Department of Motor Vehicles (DMV) maintains a large statewide computer network to record all registered motor vehicles and licensed drivers (and some unlicensed). The system generates a transcript for <u>every</u> person cited or arrested for a traffic violation who is subsequently convicted, or who defaults on bail and is forwarded by the courts to DMV. The resulting transcript becomes the basis for an entry into the Automated Management Information System (AMIS), even if the person arrested is not a licensed driver. If a citation is issued or an arrest is made in connection with a collision, the record of a collision involving a specific driver will be included in the file.

Advances in computer technology have enabled the DMV to establish a direct electronic link to nearly all of the municipal courts within the State. By means of this linkage, nearly all traffic court judges have access to complete and current driver histories, thereby making the penalties imposed by the court more in keeping with the actual driving record of the individual. DMV continues to expand this capability and is placing as many courts as possible on-line.

The Department of Justice (DOJ) system maintains a record of arrests made within the state, including the final disposition of each case. This record system shows all arrests, regardless of traffic involvement, and identifies specific vehicle code violations.

The Emergency Medical Services Authority (EMSA) has installed a statewide database of emergency medical conditions, including response times to collisions and subsequent treatment of collision victims. In the EMS system, all regional trauma systems store and retrieve medical data, with a certain mandated core data transmitted to the EMSA system. EMSA is trying to establish the means and methodology to track specific individuals from the collision to the emergency responder to the hospital and finally to hospital discharge. EMS linkage is necessary for the sensitivity index computation, and provides traffic engineers and traffic law enforcement personnel invaluable information on morbidity and mortality rates.

All cities and counties maintain traffic-related records, including data on local roadways. Many agencies report optimal effectiveness can be achieved by maintaining a local system that includes many of the same data elements contained in the statewide systems. A local system includes collision records, records of arrests and citations, and crash data on local streets and roads.

The geographic size of California and its large population makes the complete centralization of traffic records somewhat impractical. Therefore, various aspects of traffic records are delivered by a variety of responsible agencies. Consequently, it is more appropriate to refer to a traffic record network rather than a traffic record system.

Local agencies in California have identified specific difficulties in using SWITRS, primarily the time lag in receiving reports and the inconsistencies in the identification of local street names. For smaller cities, these problems do not represent major obstacles; but larger communities require an automated collision system to provide in part, a more timely record and a more accurate identification of crashes.

The Office of Traffic Safety (OTS) will continue to address the need for local systems by continuing to provide hardware and software to local grantees that are compatible with SWITRS. Many local agencies are implementing, or exploring the feasibility of implementing local Geographic Information System (GIS) based traffic record systems.

II. ACTION PLANS

OTS continues to implement the recommendations of the 1993 Traffic Records Assessment. With regard to this effort, as well as to the overall endeavor to provide effective records systems statewide, the advent of affordable Geographical Information Systems (GIS) has enhanced the awareness of the strong relationship between various aspects of traffic data and its potential impact on improved traffic safety. In keeping with this knowledge, the distinction between engineering and enforcement data records is vanishing, and is being replaced by more integrated and comprehensive systems. A variety of state and local agencies continue to work toward improving traffic record collection within the State of California. The “Traffic Records Council” was formed as recommended by a traffic record assessment team. The initial work plan was designed around the recommendations of that team. All major state departments producing traffic-related data are represented on the “council,” including OTS. The Traffic Records Assessment team and the Traffic Records Council have not met formally for a number of years. Consequently, OTS will explore the possibility of reconvening these organizations for the purpose of measuring progress and developing new goals.

OTS remains committed to providing funds to agencies on both the city and county level to purchase fully automated collision and citation records and analysis systems. OTS is confident that once implemented these systems will decrease the agency resources needed to maintain collision and citation statistical data. These systems are also expected to reduce the frequency and possibly the severity of traffic collisions in each jurisdiction where the systems are implemented.

OTS strongly recommends that both engineering and enforcement agencies become involved in system selection, deployment and data sharing. This cooperative approach results in economies of scale (time and capital) to each of the agencies due to the system licensing and compatibility between the agencies. The GIS based collision and citation analysis program will allow agencies to conserve resources while at the same time provide

transportation engineers,

public safety officers, department managers and enforcement agencies with timely, accurate and useable information upon which to base engineering, enforcement and other traffic related safety decisions.

To achieve the greatest potential for reducing fatalities and injuries, OTS recommends grantees consider the following countermeasures when preparing their project agreements *(Note: The OTS "Blueprints" contain additional recommended "best practice" countermeasures)*:

- To ensure engineering and police departments have timely access to current and complete traffic data necessary to identify, isolate and analyze critical traffic safety issues.

- To utilize a shared system to sufficiently meet client/citizen information needs.

- To sponsor projects that promote the pooling of knowledge and data and resources between agencies, cities and counties.

- To advocate system interconnectivity amongst all levels of governmental Traffic Record data gathering entities.

- To build participant consensus in the development of regional automated Traffic Record systems.

- To promote the functional and economic benefits of data sharing between entities.

- To develop prototype systems that will assist in eroding the artificial territorial paradigms of the traffic engineering/enforcement communities.

- To develop automated records systems to provide timely reports and identify numbers and severity of collisions occurring at critical locations.

- To promote traffic records systems to reduce report preparation time.

- To build automated traffic records systems to reduce the time it takes to enter the incident into the system.

- To advocate automated systems that allow police department personnel to frequently receive information concerning officer assignments, citations, arrests, and high collision locations.

- To encourage the training of personnel in record processing and data retrieval and analysis.

III. TASKS

TASK 1 - PROGRAM DEVELOPMENT AND ADMINISTRATIVE COORDINATION

This task provides for the necessary staff time and expenses incurred by OTS that are directly related to the planning, development, coordination, monitoring, auditing, and evaluation of projects within this program area, and the preparation of the 2005 Highway Safety Plan. This plan includes projects that will be continued from prior fiscal years. Funding is also provided in this task for the printing of brochures and pamphlets, distributing literature and media materials developed through successful projects, or obtained from other sources. Assistance is also provided under this task to individuals to attend and participate in technology transfer workshops, training sessions, or educational meetings or conferences.

TASK 2 - DATA RECORDS DESIGN AND IMPLEMENTATION

Projects funded in this task provide the databases and data record design by which local agencies can supplement existing collision record programs with needed roadway data.

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TR0303 - SANTA ANA POLICE DEPARTMENT
Initiated in fiscal year 2003, the "Hand-held Citation, Collision and DUI Report Writing and Data Management Project" is continued into fiscal year 2004. The project provides funds for hand-held devices with a printer and software upgrades. The primary goal of this project is to implement the hand-held computer applications that will fully automate the traffic citation/collision and DUI report writing process. The intended hand-held system will also be used to support directed enforcement programs that reduce the frequency and severity of traffic collisions throughout the city. The intent of the system is to increase the productivity of the department's traffic enforcement personnel and provide management with more timely and accurate information upon which to base directed enforcement and other traffic-related safety programs. ($0.00)

TASK 3 - COMPREHENSIVE DATA SYSTEM DESIGN AND IMPLEMENTATION

Projects funded in this task include activities that are broadly based and encompass records systems that include law enforcement, collision investigation, traffic engineering, adjudication, and emergency medical services. It is within this task that comprehensive systems, such as GIS are funded.

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TR0401 - JUDICIAL COUNCIL OF CALIFORNIA, ADMINISTRATIVE OFFICE OF THE COURTS
A new "Improved Uniform Bail and Penalty Schedule" is planned for fiscal year 2004. The project will provide funds for temporary personnel to develop a database and updated bail schedule. The primary goal of this project is to improve the Uniform Bail and Penalty Schedule by developing a database that includes all infraction and misdemeanor violations of the Vehicle Code that are citable and reportable to DMV. The database will be made available electronically to all California Courts. These changes will increase traffic safety by

improving driver records and removing problem drivers from California's roadways through proper application of fines and penalties. ($29,000)

TR0403 - DEPARTMENT OF MOTOR VEHICLES
A new "Development of a Driver License Application Management Information System (State II)" is planned for fiscal year 2004. The project will provide funds for personnel, training, travel, and computer hardware and software. The primary goal of the project is to develop and evaluate a prototype driver license application management information system and statistical database that would provide data for use in traffic safety research studies and monitoring driver licensing program operations. ($96,755)

TASK 4 - HIGH RISK DRIVER IDENTIFICATION DATA CAPTURE IMPROVEMENT PROJECTS

Projects funded under this task are primarily concerned with developing the methodology to correctly identify high-risk drivers and the subsequent development of software to allow for the tracking of the identified high-risk drivers

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TR0012 - DEPARTMENT OF MOTOR VEHICLES
Initiated in fiscal year 2000, the "Development of a Statewide Outreach Program Between Driver Safety and Local Law Enforcement Agencies and Forensic Laboratories" project is continued into fiscal year 2004. The project provides funds for personnel, travel, training, laptop computers, conferences and indirect costs. Project activities include training law enforcement agencies and forensic laboratories, and disseminating an Administrative Per Se training video. ($36,899.66)

TR0302 - CALIFORNIA DEPARTMENT OF MOTOR VEHICLES
A new "Development of a Long Range Strategy and Procurement of a Biometrics Verification System is planned for fiscal year 2003. The project provides funds for consultant services to advise DMV how to implement a Biometrics Verification System (BVS). The design will ensure that one person has only one driver's license or identification (DL/ID) number and one DL/ID number belongs to only one person. The consultant will include developing the requirements necessary to secure a contractor to develop the BVS, and to develop a plan on cleansing the 80+ million images contained in the image database. ($250,000)

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TR0002 - DEPARTMENT OF TRANSPORTATION
Initiated in fiscal year 2000, the "Collision Recording and Documentation Project" is continued into fiscal year 2004. The project seeks to provide enhancements to equipment and techniques and to improve the procedures and the effectiveness of collision documentation and analysis. This project also seeks to increase the accuracy of the crash data collected and thereby minimize disputed factual data. The planned collision documentation data set and analysis will allow for a thorough understanding of collision causes to subsequently reduce the likelihood of additional crashes. ($247,647) (Q08)

TR0006 - CALIFORNIA DEPARTMENT OF MOTOR VEHICLES
Initiated in fiscal year 2001, the "Development and Evaluation of an Educational Strategy for Decreasing the Collision Risk of High Risk Elderly Drivers" project is continued into fiscal year 2004. The project provides funds for personnel, educational materials, postage, and

indirect costs. Project activities include the identification of groups of elderly drivers with inflated crash rates, development and dissemination of an educational self-assessment kit,

follow-up evaluation of group crash data. The project goal is to decrease the crash rate of identifiable high-risk elderly drivers through educational and informational materials. ($16,047)

TR0201 - CALIFORNIA DEPARTMENT OF MOTOR VEHICLES

Initiated in fiscal year 2002, the "Electronic DUI Forms" project is continued into fiscal year 2004. The project provides funds for travel, contractual services, two database servers, two application servers, two rack setups, digital directory server two QL servers and software. Project activities include the development and implementation of an automated system that, via the Internet will allow DUI treatment program providers to report directly to DMV on the progress of individuals mandated to DUI treatment. The project goals are to expedite the update of participant driving records and notification to the offender of license suspension, revocation, restriction, or reinstatement. Due to implementation delays, this project was previously known as TR0008. ($545,839)

FISCAL YEAR 2004 PROGRAM FUNDING
(TRAFFIC RECORDS)

Task	Title	Major Cost Items
1	Program Development and Administrative Coordination	Personnel and Operating Expenses
2	Data Records Design and Implementation	Consultant Services and Computer Equipment
3	Comprehensive Data System Design and Implementation	Staff Salaries, Consultant Services and Computer Equipment
4	High Risk Driver Identification Data Capture Improvement Projects	Staff Salaries, Consultant Services and Computer Equipment

Program Code	Task No/ Agency	Funding Sources/Codes 157	163	402	405	410	411	Estimated Agency Contribution
TR	1 Local	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
	State	$0.00	$0.00	$104,908.00	$0.00	$0.00	$0.00	$0.00
TR	2 Local	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$182,500.00
	State	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
TR	3 Local	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
	State	$0.00	$125,755.00	$0.00	$0.00	$0.00	$0.00	$0.00
TR	4 Local	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
	State	$250,000.00	$809,533.00	$0.00	$0.00	$0.00	$0.00	$446,831.00
PSP TOTALS	LOCAL:	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$182,500.00
	STATE:	$250,000.00	$935,288.00	$104,908.00	$0.00	$0.00	$0.00	$446,831.00